

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 1. (Previously Presented) A method of controlling communications in a wireless
2 network comprising:
3 receiving, in a wireless network controller, an indicator that comprises one of
4 plural training sequences in a message sent over an air link by a mobile station to establish a data
5 transfer session in the wireless network; and
6 selecting one of plural types of protocol stacks in the wireless network controller
7 to use for communications over the air link between the wireless network controller and mobile
8 station based on which of the plural training sequences is in the message.

1 2. (Previously Presented) A method of controlling communications in a wireless
2 network comprising:
3 receiving, in a wireless network controller, a Temporary Logical Link Identity
4 (TLLI) structure in a message sent over an air link by a mobile station to establish a data transfer
5 session in the wireless network; and
6 selecting one of plural types of protocol stacks in the wireless network controller
7 to use for communications over the air link between the wireless network controller and mobile
8 station based on a value of the TLLI structure,
9 wherein selecting one of plural types of protocol stacks comprises selecting from
10 protocol stacks comprising a GERAN protocol stack.

1 3. (Original) The method of claim 2, wherein selecting one of plural types of
2 protocol stacks comprises selecting from plural stacks comprising the GERAN protocol stack
3 and an EGPRS protocol stack.

1 4. (Original) The method of claim 1, wherein selecting one of plural types of
2 protocol stacks comprises selecting from protocol stacks comprising an EGPRS protocol stack.

1 5. (Currently Amended) A method of controlling communications in a wireless
2 network comprising:
3 receiving, in a wireless network controller, ~~an indicator~~ a Temporary Logical Link
4 Identity structure in a message sent by a mobile station to establish a data transfer session in the
5 wireless network, wherein the Temporary Logical Link Identity structure has one of plural
6 values; and
7 selecting one of plural types of protocol stacks to use for communications over an
8 air link between the wireless network controller and mobile station based on which of the plural
9 values is contained in the Temporary Logical Link Identity structure ~~the indicator~~;
10 ~~wherein receiving the indicator comprises receiving a Temporary Logical Link~~
11 ~~Identity structure having one of plural values.~~

1 6. (Original) The method of claim 5, wherein selecting one of plural types of
2 protocol stacks comprises selecting a first protocol stack if the Temporary Logical Link Identity
3 structure has a first value.

1 7. (Original) The method of claim 6, wherein selecting one of plural types of
2 protocol stacks further comprises selecting a second protocol stack if the Temporary Logical
3 Link Identity structure has a second value.

1 8. (Currently Amended) The method of claim 1, wherein selecting one of plural
2 types of protocol stacks comprises selecting a first protocol stack if the ~~indicator~~ Temporary
3 Logical Link Identity structure has a first value and selecting a second protocol stack if the
4 ~~indicator~~ Temporary Logical Link Identity structure has a second value.

1 9. (Previously Presented) A method of controlling communications in a wireless
2 network comprising:
3 receiving, in a wireless network controller, an indicator in a message sent by a
4 mobile station to establish a data transfer session in the wireless network; and
5 selecting one of plural types of protocol stacks to use for communications over an
6 air link between the wireless network controller and mobile station based on the indicator,
7 wherein receiving the indicator comprises receiving a parameter used for
8 contention resolution by the wireless network controller for distinguishing between multiple
9 mobile stations that are contending for a common resource.

1 10. (Original) The method of claim 9, further comprising performing contention
2 resolution using the parameter.

1 11. (Original) The method of claim 9, wherein receiving the parameter comprises
2 receiving a Temporary Logical Link Identity.

1 12. (Original) The method of claim 9, wherein receiving the parameter comprises
2 receiving a GERAN Contention Resolution Identity.

1 13. (Cancelled)

1 14. (Previously Presented) A system comprising:
2 an interface to an air link to communicate with mobile stations; and
3 a controller adapted to perform contention resolution with a first type of mobile
4 station using a first type of indicator, the controller adapted to communicate signaling according
5 to a first wireless protocol with the first type of mobile station, and
6 the controller adapted to perform contention resolution with a second type of
7 mobile station using a second type of indicator, the controller adapted to communicate signaling
8 according to a second wireless protocol with the second type of mobile station.

1 15. (Original) The system of claim 14, wherein the first wireless protocol comprises
2 a GERAN wireless protocol.

1 16. (Original) The system of claim 15, wherein the second wireless protocol
2 comprises an EGPRS wireless protocol.

1 17. (Original) The system of claim 14, wherein the first wireless protocol comprises
2 an EGPRS wireless protocol.

1 18. (Original) The system of claim 14, wherein the first type of indicator comprises a
2 Temporary Logical Link Identity (TLLI) structure having a first value, and the second type of
3 indicator comprises a TLLI structure having a second value.

1 19. (Previously Presented) The system of claim 18, wherein the first value indicates
2 one of a local TLLI, a foreign TLLI, and a random TLLI, and the second value indicates one of a
3 local GCRI and a random GCRI.

1 20. (Currently Amended) An article comprising at least one computer-readable
2 storage medium containing instructions that when executed cause at least one processor in a
3 wireless access system to:
4 receive a Temporary Logical Link Identity (TLLI) structure in a message sent by
5 a mobile station over an air link to establish a data transfer session; and
6 select, based on a value of the TLLI structure, one of plural protocol stacks in the
7 wireless access system to use for communications over the air link between the wireless access
8 system and the mobile station.

1 21. (Currently Amended) The article of claim 20, wherein the instructions when
2 executed cause the at least one processor in the wireless access system to select one of plural
3 protocol stacks by selecting a first protocol stack in response to the ~~indicator~~ TLLI structure
4 having a first value and selecting a second protocol stack in response to the ~~indicator~~ TLLI
5 structure having a second value.

1 22. (Currently Amended) An article comprising at least one computer-readable
2 storage medium containing instructions that when executed cause at least one processor in a
3 wireless access system to:
4 receive a Temporary Logical Link Identity (TLLI) structure in a message sent by
5 a mobile station over an air link to establish a data transfer session; and
6 select one of a GERAN protocol stack and an EGPRS protocol stack, in response
7 to one of plural values of the TLLI structure, in the wireless access system to use for
8 communications over an air link between the wireless access system and the mobile station.

1 23. (Cancelled)

1 24. (Currently Amended) An article comprising at least one computer-readable
2 storage medium containing instructions that when executed cause at least one processor in a
3 wireless access system to:
4 perform contention resolution with a first type of mobile station using a first type
5 of indicator;
6 communicate signaling according to a first wireless protocol with the first type of
7 mobile station;
8 perform contention resolution with a second type of mobile station using a second
9 type of indicator; and
10 communicate signaling according to a second wireless protocol with the second
11 type of mobile station.

1 25. (Currently Amended) The article of claim 24, wherein the instructions when
2 executed cause the at least one processor in the wireless access system to select one of plural
3 types of protocol stacks based on which of the first and second types of indicators is received.

1 26. (Previously Presented) The article of claim 24, wherein performing contention
2 resolution with the first type of mobile station comprises performing contention resolution using
3 the first type of indicator to distinguish between the first type mobile station and at least another
4 mobile station, and
5 wherein performing contention resolution with the second type of mobile station
6 comprises performing contention resolution using the second type of indicator to distinguish
7 between the second type of mobile station and another mobile station.

1 27. (Previously Presented) The method of claim 1, wherein selecting one of plural
2 types of protocol stacks in the wireless network controller comprises selecting one of plural types
3 of protocol stacks in one of a base station controller and radio network controller.

1 28. (Previously Presented) The system of claim 14, wherein the controller performs
2 contention resolution with the first type of mobile station by distinguishing the first type of
3 mobile station from another mobile station using the first type of indicator, and
4 the controller performs contention resolution with the second type of mobile
5 station by distinguishing the second type of mobile station from another mobile station using the
6 second type of indicator.